(No Model.)

M. F. HENDERSON.

BICYCLE SADDLE.

No. 576,310. Patented Feb. 2, 1897.

Fig. 1.

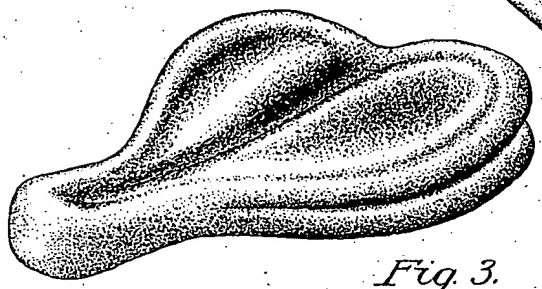

Fig. 2.

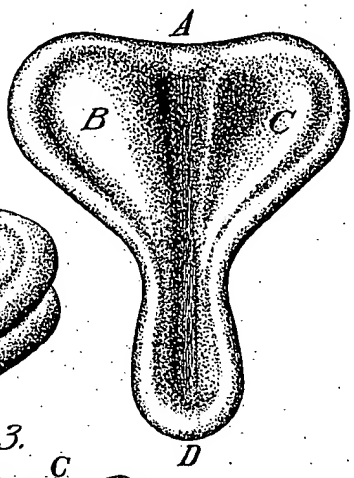

Fig. 3.

Fig. 4.

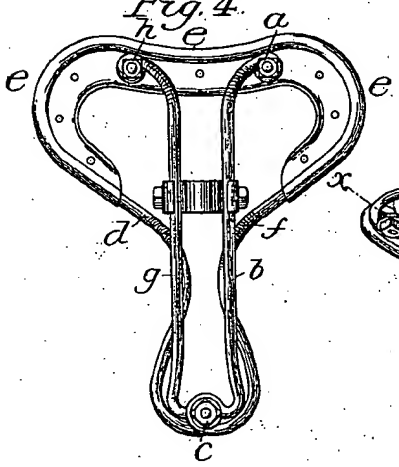

Fig. 7.

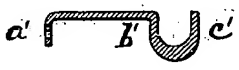

Fig. 5.

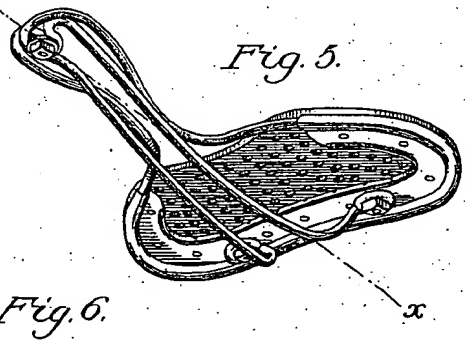

Fig. 6.

Witnesses.
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UNITED STATES PATENT OFFICE.

MARY F. HENDERSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 576,310, dated February 2, 1897.

Application filed November 24, 1896. Serial No. 613,238. (No model.)

To all whom it may concern:

Be it known that I, MARY F. HENDERSON, of the city of Washington, District of Columbia, have invented certain new and useful Improvements in Bicycle-Saddles; and I do hereby declare that the following, in connection with the drawings, is a full and exact description of the same.

This invention relates to an improved bicycle saddle and cushion.

The object of the present invention is to provide a cushioned seat supported by a saddle-frame which will secure comfort and safety to the rider.

The object in the construction of the cushion of the saddle is to provide an edge or edges bordering on two interior soft cushions, which edges will be soft enough to be comfortable to the rider, yet will retain enough rigidity to keep the upper surface of the seat quite away from the saddle-frame, and which will serve at the same time to prevent the rider from slipping or sliding on the seat in the rising-and-falling movement of the legs in operating the treadle.

The object of my invention regarding the framework of the saddle is to provide a support for the cushion of as little bulk or weight as is consistent with strength.

In the construction of the saddle-frame a wire forming the outline of the saddle is strengthened at the rear end by a brace that serves three purposes. The brace is so struck up or bent as to furnish two flanges running downward from the level of the saddle-seat, thereby giving strength to the structure with lightness. The outer flange forms a groove or socket for inclosing the wire, avoiding the extra bulk or weight which would result if the wire were placed on top of a brace.

The inside flange, perforated or indented, serves for the attachment of the cushion to the saddle-frame.

The saddle-frame provides for a seat made of perforated wood, cane, or other material which will give stability to the cushion-cover.

In the drawings, Figure 1 is a perspective view of the saddle-cushion. Fig. 2 is a top plan view of the same. Fig. 3 is a sectional view of the same. Fig. 4 is a bottom plan view of the saddle-frame. Fig. 5 is a perspective view of the saddle-frame seen from underneath. Fig. 6 is a sectional vertical elevation of the same. Fig. 7 is a sectional view of the brace of the saddle-frame.

The essential feature of my saddle-cushion is an edge or edges B′ C′, made of cloth or other material and stuffed with any suitable flexible and resisting substance firmly fastened. These edges may also be made of rubber tubing or compressed-air tubing. They may or may not continue all around the outside edge of the cushion, and they may also be single or repeated once or several times where more or less flexibility or rigidity is needed.

A depression is made longitudinally through the center of the cushion, as seen between A and D in Fig. 2. At B and C, Fig. 2, two soft cushions are represented lying between the depression just mentioned and the outside edges. The sectional transverse view, Fig. 3, shows more fully the soft inside cushions and the more rigid edges at B′ and C′.

In the construction of the saddle-frame a wire, as shown in Fig. 4, starts around the screw at *a* and follows in a slightly-curved line first downward and upward, passing by a part of the frame at *b* until it meets and surrounds the screw, as represented at *c*, then follows in a line to suit and conform with the contour of the leg of the rider at *f*, then around to form the general shape of the rear of the saddle, as clearly shown, then repeats the curve of *f* at *d*, again around the screw at *c*, along to *g*, and terminates around the screw at *h*.

The brace is shown at *e e e*, Fig. 4, made of steel, wood, or other suitable material, but preferably of steel plate pressed into shape. The ribs or flanges are better shown at *a′ b′ c′*, Fig. 7. The rib or flange at *a′*, Fig. 7, serves, when perforated or indented, for attaching the cover or cushion to the saddle-frame.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An improved bicycle-cushion with two soft cushion-lobes in connection with a depression in the center of the seat, and a firmer border of yielding material.

2. An improved bicycle-cushion with two or more firm but yielding edges made near

together, for especially hard use, substantially as described.

3. An improved saddle-frame consisting of a wire bent at one end into an eye for the reception of a screw on one side of the central line, curved downwardly and upwardly to the pommel where a second eye is formed, then returned toward the cantle, and shaped to conform to the contour of the leg of the rider, and curved also to form the cantle, then curved in a similar manner, on the opposite side of the central line to form a complete frame.

4. An improved saddle-frame consisting of a wire bent in a slightly-curved line first downward and then upward, from the cantle to the pommel and thence extending rearwardly and shaped to conform to the leg of the rider, and curved to form the cantle, the wire being then so bent as to duplicate the just-described construction to form the second half of the saddle-frame.

5. A metallic cantle-plate for a bicycle-saddle, formed of the general shape of the rear portion of a saddle, and provided with at least three depending ribs or flanges approximately parallel extending therearound, and with the space between two of the flanges serving as an extra support and as a seat of a wire saddle-frame substantially as described.

In testimony whereof I have signed this specification in the presence of two witnesses.

MARY F. HENDERSON.

Witnesses:
J. B. HENDERSON,
LEONARD G. HOFFMAN.